

## Impact Water Quality Monitoring for Dredging Activities

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
14/12/2012	MF	US1	09:50:52	B	7.0	311.4	0.35	20.70	31.84	92.6	6.89	26.8	7.80	26
14/12/2012	MF	US1	09:51:51	M	4.5	313.7	0.31	20.71	31.83	92.0	6.84	20.1	7.79	27
14/12/2012	MF	US1	09:52:42	T	1.0	329.4	0.37	20.72	31.76	92.4	6.87	10.4	7.78	27
14/12/2012	MF	US1	09:53:35	B	6.9	270.1	0.55	20.70	31.83	91.8	6.83	18.7	7.78	28
14/12/2012	MF	US1	09:54:36	M	4.5	340.2	0.46	20.71	31.83	91.8	6.83	22.2	7.78	6
14/12/2012	MF	US1	09:55:56	T	1.1	333.4	0.48	20.75	31.75	92.6	6.88	10.2	7.78	8
14/12/2012	MF	US2	10:02:10	B	6.3	272.4	0.26	20.64	31.76	92.5	6.89	19.0	7.78	24
14/12/2012	MF	US2	10:03:08	M	4.1	330.3	0.60	20.64	31.73	92.2	6.87	19.6	7.77	25
14/12/2012	MF	US2	10:03:56	T	1.0	295.4	0.62	20.71	31.61	93.1	6.93	11.4	7.77	20
14/12/2012	MF	US2	10:05:12	B	6.0	330.9	0.39	20.64	31.75	91.8	6.84	21.0	7.77	19
14/12/2012	MF	US2	10:06:04	M	4.3	239.6	0.23	20.62	31.72	92.3	6.88	17.2	7.77	14
14/12/2012	MF	US2	10:06:43	T	1.0	295.4	0.62	20.64	31.68	92.6	6.90	13.6	7.77	13
14/12/2012	MF	DS1	09:36:59	B	9.2	359.1	0.20	20.54	31.91	93.0	6.94	28.8	7.80	40
14/12/2012	MF	DS1	09:37:58	M	5.6	203.2	0.17	20.59	31.86	92.9	6.93	28.1	7.79	42
14/12/2012	MF	DS1	09:39:00	T	0.7	254.7	0.57	20.69	31.81	92.6	6.89	16.1	7.79	42
14/12/2012	MF	DS1	09:39:54	B	9.0	289.6	0.76	20.55	31.90	92.9	6.93	33.7	7.80	42
14/12/2012	MF	DS1	09:41:08	M	5.5	236.8	0.35	20.55	31.89	93.1	6.94	34.3	7.79	20
14/12/2012	MF	DS1	09:42:08	T	1.1	214.1	0.47	20.68	31.82	92.5	6.89	18.2	7.79	21
14/12/2012	MF	DS2	09:25:05	B	8.8	289.8	0.52	20.53	31.91	93.6	6.98	33.3	7.81	50
14/12/2012	MF	DS2	09:26:04	M	5.7	284.3	0.46	20.56	31.82	93.4	6.97	26.3	7.80	51
14/12/2012	MF	DS2	09:26:47	T	0.8	249.7	0.38	20.66	31.73	93.2	6.94	15.5	7.79	32
14/12/2012	MF	DS2	09:27:33	B	9.3	259.3	0.64	20.53	31.91	93.3	6.96	38.3	7.80	33
14/12/2012	MF	DS2	09:28:30	M	5.5	313.4	0.44	20.56	31.81	93.1	6.94	24.3	7.79	18
14/12/2012	MF	DS2	09:29:30	T	1.0	317.3	0.78	20.60	31.75	93.0	6.93	17.8	7.79	18
14/12/2012	MF	DS3	09:10:26	B	27.0	267.1	0.22	20.58	31.70	92.4	6.89	46.2	7.80	42
14/12/2012	MF	DS3	09:11:39	M	15.1	303.5	0.42	20.59	31.65	92.2	6.88	31.2	7.79	41
14/12/2012	MF	DS3	09:13:04	T	0.6	125.9	0.04	20.64	31.42	91.9	6.86	15.8	7.78	32
14/12/2012	MF	DS3	09:14:58	B	27.7	267.1	0.22	20.56	31.74	92.3	6.88	24.2	7.79	31
14/12/2012	MF	DS3	09:17:00	M	14.9	351.2	0.42	20.58	31.67	92.3	6.89	17.4	7.79	33
14/12/2012	MF	DS3	09:18:17	T	0.7	305.6	0.43	20.62	31.46	92.0	6.87	20.2	7.78	32
14/12/2012	MF	DS4	08:59:40	B	8.4	260.9	0.23	20.61	31.26	92.2	6.89	33.2	7.83	39
14/12/2012	MF	DS4	09:00:34	M	5.2	322.1	0.29	20.63	31.13	91.6	6.85	25.8	7.82	41
14/12/2012	MF	DS4	09:01:43	T	0.9	99.5	0.29	20.68	31.00	91.6	6.85	14.6	7.81	34
14/12/2012	MF	DS4	09:02:35	B	8.3	296.6	0.34	20.61	31.24	91.6	6.85	29.2	7.82	36
14/12/2012	MF	DS4	09:03:31	M	5.4	253.4	0.40	20.62	31.21	91.5	6.84	25.0	7.81	17
14/12/2012	MF	DS4	09:04:20	T	0.9	99.5	0.29	20.66	31.03	91.6	6.85	18.0	7.81	18
14/12/2012	MF	DS5	08:42:29	B	7.8	279.0	0.22	20.61	31.25	92.4	6.91	64.3	7.84	49
14/12/2012	MF	DS5	08:43:33	M	5.4	6.6	0.16	20.61	31.18	92.1	6.89	32.7	7.83	51
14/12/2012	MF	DS5	08:44:41	T	0.9	304.3	0.48	20.65	30.66	91.3	6.85	12.6	7.81	31
14/12/2012	MF	DS5	08:45:57	B	8.2	345.7	0.32	20.60	31.28	91.9	6.87	56.1	7.84	33
14/12/2012	MF	DS5	08:46:59	M	5.2	308.0	0.42	20.61	31.21	92.0	6.88	33.5	7.83	11
14/12/2012	MF	DS5	08:53:19	T	1.1	335.2	0.46	20.66	30.87	91.4	6.84	14.3	7.80	10
14/12/2012	MF	MW1	07:18:32	B	19.1	12.1	0.28	20.73	32.57	91.3	6.76	26.9	7.80	41
14/12/2012	MF	MW1	07:19:56	M	10.6	306.2	0.12	20.73	32.57	91.5	6.77	24.0	7.81	43
14/12/2012	MF	MW1	07:21:33	T	0.9	90.6	0.28	20.73	32.53	92.1	6.82	16.3	7.81	30
14/12/2012	MF	MW1	07:23:40	B	19.4	335.5	0.28	20.73	32.55	91.0	6.74	27.3	7.81	32
14/12/2012	MF	MW1	07:24:42	M	10.6	174.5	0.14	20.72	32.52	91.6	6.78	21.2	7.81	27
14/12/2012	MF	MW1	07:26:08	T	0.7	350.6	0.21	20.72	32.53	92.0	6.81	18.8	7.81	29

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14/12/2012	ME	US1	12:57:03	B	10.1	53.3	0.32	20.57	32.16	91.9	6.84	10.6	7.91	14
14/12/2012	ME	US1	12:57:57	M	6.2	77.1	0.42	20.61	32.04	91.5	6.81	10.9	7.90	13
14/12/2012	ME	US1	12:58:51	T	1.1	99.8	0.50	20.74	31.82	92.6	6.88	8.0	7.90	9
14/12/2012	ME	US1	12:59:43	B	10.2	294.8	0.13	20.57	32.16	91.7	6.82	10.3	7.91	11
14/12/2012	ME	US1	13:00:30	M	5.7	139.7	0.39	20.60	32.00	91.5	6.81	10.9	7.90	8
14/12/2012	ME	US1	13:01:15	T	1.0	99.8	0.50	20.66	31.86	92.3	6.87	9.1	7.90	9
14/12/2012	ME	US2	12:47:24	B	9.3	105.5	0.39	20.59	31.91	91.9	6.85	13.4	7.88	22
14/12/2012	ME	US2	12:48:17	M	5.4	50.0	0.47	20.63	31.88	91.5	6.81	10.0	7.88	22
14/12/2012	ME	US2	12:49:06	T	0.8	47.5	0.66	20.79	31.82	92.6	6.88	8.3	7.89	12
14/12/2012	ME	US2	12:49:53	B	9.3	121.6	0.48	20.62	31.92	91.4	6.81	12.7	7.89	13
14/12/2012	ME	US2	12:50:37	M	5.5	148.3	0.46	20.65	31.87	91.5	6.81	10.0	7.89	10
14/12/2012	ME	US2	12:51:20	T	1.0	43.7	0.35	20.71	31.84	92.2	6.86	8.6	7.89	8
14/12/2012	ME	DS1	13:07:55	B	8.2	146.2	0.44	20.61	32.05	91.6	6.81	22.4	7.93	37
14/12/2012	ME	DS1	13:08:48	M	5.0	96.0	0.41	20.63	31.95	91.0	6.77	26.7	7.92	38
14/12/2012	ME	DS1	13:09:42	T	0.9	56.2	0.20	20.72	31.84	92.0	6.84	15.3	7.92	33
14/12/2012	ME	DS1	13:11:16	B	8.3	107.2	0.32	20.61	32.04	91.2	6.79	23.2	7.91	32
14/12/2012	ME	DS1	13:12:07	M	5.1	93.5	0.68	20.64	31.91	91.1	6.78	25.0	7.91	14
14/12/2012	ME	DS1	13:14:26	T	1.0	149.3	0.54	20.71	31.86	91.9	6.83	15.0	7.91	15
14/12/2012	ME	DS2	13:19:55	B	7.3	18.2	0.16	20.59	31.97	91.8	6.84	24.5	7.92	49
14/12/2012	ME	DS2	13:20:40	M	4.3	63.4	0.38	20.59	31.95	91.7	6.83	21.1	7.92	48
14/12/2012	ME	DS2	13:21:35	T	1.1	149.3	0.54	20.68	31.82	92.6	6.89	11.3	7.92	28
14/12/2012	ME	DS2	13:22:57	B	7.1	116.3	0.55	20.59	31.97	91.6	6.82	27.0	7.92	27
14/12/2012	ME	DS2	13:23:48	M	4.7	229.7	0.27	20.57	31.94	91.7	6.83	23.4	7.92	11
14/12/2012	ME	DS2	13:24:39	T	1.1	149.3	0.54	20.77	31.82	92.9	6.90	12.4	7.92	11
14/12/2012	ME	DS3	13:30:39	B	5.8	65.9	0.46	20.63	31.95	93.2	6.94	8.1	7.93	8
14/12/2012	ME	DS3	13:31:20	M	4.3	116.9	0.27	20.60	31.93	92.8	6.91	9.2	7.92	9
14/12/2012	ME	DS3	13:32:02	T	1.2	124.8	0.68	20.87	31.78	94.0	6.98	6.9	7.93	10
14/12/2012	ME	DS3	13:32:48	B	6.2	101.7	0.53	20.62	31.96	92.8	6.91	9.7	7.92	11
14/12/2012	ME	DS3	13:33:45	M	4.2	116.9	0.27	20.59	31.93	92.4	6.89	10.0	7.92	5
14/12/2012	ME	DS3	13:34:35	T	1.1	124.8	0.68	20.78	31.79	93.2	6.92	8.6	7.92	5
14/12/2012	ME	DS4	13:42:59	B	4.7	69.9	0.62	20.81	31.85	94.0	6.98	6.2	7.92	8
14/12/2012	ME	DS4	13:43:37	M	3.7	50.9	0.41	20.79	31.86	93.8	6.97	8.6	7.92	7
14/12/2012	ME	DS4	13:44:22	T	1.1	17.8	0.40	20.87	31.70	94.5	7.02	8.7	7.92	8
14/12/2012	ME	DS4	13:46:09	B	5.2	95.3	0.79	20.79	31.88	93.5	6.94	7.6	7.92	10
14/12/2012	ME	DS4	13:46:37	M	3.7	43.8	0.56	20.79	31.88	93.5	6.95	6.4	7.92	6
14/12/2012	ME	DS4	13:47:34	T	1.1	160.0	0.45	20.81	31.77	94.1	6.99	5.5	7.91	5
14/12/2012	ME	DS5	13:54:49	B	3.2	20.8	0.51	20.95	31.77	96.8	7.17	5.5	7.92	4
14/12/2012	ME	DS5	13:55:17	M	2.0	115.6	0.52	20.91	31.80	95.4	7.07	5.5	7.92	6
14/12/2012	ME	DS5	13:55:44	T	1.0	160.0	0.45	20.88	31.81	95.1	7.05	6.0	7.92	9
14/12/2012	ME	DS5	13:56:12	B	3.3	9.8	0.48	20.82	31.90	94.6	7.02	6.3	7.92	7
14/12/2012	ME	DS5	13:56:42	M	2.2	82.8	0.11	20.86	31.80	94.5	7.01	6.7	7.92	6
14/12/2012	ME	DS5	13:57:13	T	1.0	115.6	0.52	20.96	31.58	95.6	7.09	6.1	7.91	6
14/12/2012	ME	MW1	14:36:25	B	19.2	352.2	0.20	20.84	32.61	89.4	6.60	7.1	7.85	8
14/12/2012	ME	MW1	14:37:28	M	10.4	237.1	0.23	20.84	32.59	89.4	6.60	6.9	7.84	7
14/12/2012	ME	MW1	14:38:30	T	1.1	99.5	0.56	20.86	32.59	89.6	6.62	6.4	7.83	10
14/12/2012	ME	MW1	14:39:35	B	19.1	247.2	0.08	20.84	32.58	89.0	6.57	7.4	7.83	8
14/12/2012	ME	MW1	14:41:01	M	10.7	89.0	0.71	20.84	32.59	89.0	6.57	7.1	7.83	6
14/12/2012	ME	MW1	14:41:59	T	1.2	105.8	0.44	20.85	32.59	89.3	6.60	7.0	7.83	5